

STATE OF ALASKA

DEPT. OF HEALTH & SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH
SECTION OF EPIDEMIOLOGY

3601 "C" STREET, SUITE 540
P.O. BOX 240249
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TONY KNOWLES, GOVERNOR

INFECTIOUS DISEASES
AIDS/STD
TUBERCULOSIS
IMMUNIZATION
CHRONIC DISEASES
DIABETES
INJURY CONTROL

(907) 269-8000
FAX 582-7802

June 4, 2002

Dear Healthcare Provider:

The Division of Public Health, Section of Epidemiology recently initiated a new Statewide Mercury Biomonitoring Program (See attached *Bulletin* No. 11). All pregnant women are eligible to submit a hair sample for mercury testing. The testing is confidential and free-of-charge. The results, along with an interpretation, will be sent to you to discuss with your patient. Summary data will be made available on a regular basis.

The results of this program will be important in developing future public health advice for fish consumption in Alaska. We would appreciate your assistance in encouraging your pregnant patients to participate in this voluntary program.

A patient information pamphlet is enclosed for your review. To participate in the Statewide Mercury Biomonitoring Program, for information on how to collect and submit hair samples, and to obtain test kits, please contact the Section of Epidemiology, Environmental Public Health Program (907) 269-8000.

Yours truly,



John Middaugh, M.D.
State Epidemiologist

Enclosures

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Mercury in Hair Monitoring Program

Information for Pregnant Women

If you choose to participate in this program, a small sample of your hair will be collected and analyzed for mercury. Your health care provider will receive a letter with an explanation of your lab results, which they can discuss with you.

Why are we measuring mercury levels?

Mercury occurs naturally in the environment and has always been present in fish and marine mammals. Mercury is released into the air through coal burning and industrial pollution. It reaches the Arctic mainly through air and water currents. Mercury is taken up by fish and passed on to people who eat fish. High levels of mercury can cause human health problems. The good news is that levels of mercury in Alaska are low.

Why are we collecting hair?

Mercury is incorporated into hair as it grows and remains in hair for a long time. The level of mercury in human hair can give us information about exposure to mercury in the diet. By comparing levels over time, we will know if mercury levels are changing.

What will happen if I choose to participate?

If you choose to participate, a small sample of your hair (about 50 hairs or 1/8 inch in diameter) will be cut at the back of your head close to your scalp.

This is about the size of this dot: ●

- ◆ Participation is completely voluntary
- ◆ The place where the hair was cut should not be noticeable.
- ◆ There is no charge for the mercury test.
- ◆ Your health care provider will receive a copy of your test results.
- ◆ Your results are confidential.

Who can I contact for more information?

Talk to your health care provider if you have further questions. You can also contact the Environmental Public Health Program at the above address and number.

Mercury in Hair Monitoring Program

Instructions for Obtaining Hair Sample

Please carefully read through these instructions before you begin.

Please find the following items in this kit for obtaining the hair sample:

- A small zip-lock bag with a label, in which to place the hair sample
- A piece of dental floss to tie around the hair sample before it is cut

To collect the hair sample:

The best place to remove hair (the least obvious area) would be in the middle of the back of the head. The sample of hair should be approximately 50 hairs or a lock that is 1/8 of an inch in diameter.

That would be about the size of this dot: ●



1. Grasp hair loosely and pull to side of head.



2. Identify sample location and amount of hair to be cut.



3. Clamp the hair sample near the scalp, using a hemostat, leaving enough space to cut between the clamp and the scalp.



4. Place scissors between the hemostat and scalp and cut sample as close to the scalp as possible.

(Continued on reverse side)



5. Leaving the hemostat in place, tie hair sample with dental floss.



6. Make sure dental floss is tied tightly around hair sample.



7. Remove hemostat from hair sample.



8. Place entire hair sample in the zip-lock bag and label with the following information:

Patient name
 Date of birth
 Address
 Date of collection
 Date of last menses
 Provider name

Please place the ziplock bag in the postage paid envelope provided.

Thank you for taking the time to participate in this project.



Department of Health and Social Services
Jay Livey, Commissioner

Division of Public Health
Karen Pearson, Director

Section of Epidemiology
John Middaugh, MD, Editor

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Bulletin No. 11 June 4, 2002

Statewide Mercury Hair Biomonitoring Program

Mercury occurs naturally in the environment and accumulates in fish and marine mammals. It is released into the air through coal burning and industrial pollution and reaches the Arctic primarily through air and water currents. While human exposure to mercury can occur several ways, in Alaska exposure is primarily through eating fish or marine mammals.

In 2001 the U.S. Environmental Protection Agency (USEPA) and U.S. Food and Drug Administration (USFDA) issued national fish advisories advising women of childbearing age to restrict consumption of fish. These advisories, which were not based upon data on mercury levels in fish from Alaska, caused considerable concern among Alaskans over the possible risks of fish consumption, particularly to pregnant women and their developing fetuses.

In response, the Alaska Division of Public Health (DPH) convened an expert panel* to review existing data on the levels of mercury in Alaska fish and humans and to provide dietary guidance to Alaskans.

Mercury levels are very low in the most frequently consumed fish from Alaska; the levels found in Alaska salmon are among the lowest documented. The FDA subsequently acknowledged that mercury levels in Alaska fish are far below the average levels upon which it issued its advisory. As a result, the FDA recommended that consumers contact local health authorities for specific consumption recommendations.

After reviewing all of the information, the panel unanimously endorsed continued unrestricted consumption of Alaska seafood. DPH and members of the panel* strongly recommend that all Alaskans, including pregnant women, women who are breast-feeding, women of childbearing age, and young children continue unrestricted consumption of fish from Alaskan waters.

This consumption advice was developed as a collaborative effort among scientists, health policy makers, and community leaders working together to develop specific advice based on Alaska-specific data in a manner that is respectful of cultural and social issues and of maximum benefit to the health of local consumers. The process utilized was one of consensus, based on science, and the scientists and board members of the 10 partner organizations endorsed the advice.

Because scientists continue to argue over the potential adverse effects of mercury exposure from fish consumption, concerns remain among many Alaskans. In order to validate current Alaska public health recommendations regarding fish consumption, the DPH has implemented a statewide, free, and confidential biomonitoring program for women of childbearing age who harbor concerns regarding mercury exposure. Due to budget constraints and because the greatest risk is to the

fetus, the initial stage of the biomonitoring program will be limited to pregnant women. This public health program involves collection of a small sample of hair and measuring the level of mercury in the hair sample.

Mercury is incorporated into hair as it grows and remains in hair for a long time. The level of mercury in human hair can provide valuable information about exposure to mercury in the diet. All pregnant women up to and including the time of delivery are eligible to have their health care provider submit a hair sample for mercury testing. The program is voluntary, and the results will be sent to the woman's health care provider. Summary data will be made available on a regular basis. If elevated levels are detected (elevated being levels above the World Health Organization's standard of 10 parts per million), DPH will initiate an epidemiological investigation and make recommendations based on the results of the investigation.

There are no data to suggest that mercury levels in Alaskans pose a health risk. The information gained through this statewide biomonitoring program will provide valuable information and additional reassurance that fish consumption does not pose a health risk for pregnant women. In addition, by comparing levels of mercury in hair samples over time, we will know if mercury levels are changing.

Hair mercury testing is a standardized test and the hair collection method is non-invasive. Women who choose to participate in this program will have a small sample of hair (about 1/8 inch in diameter) collected from the back of the head close to the scalp. The place where the hair is cut should not be noticeable. The Section of Epidemiology will provide the materials necessary for submitting hair samples for analysis. Initially, a contract laboratory in Seattle will analyze hair samples. In the future, as it develops capacity, the State Public Health Laboratory will be performing the analysis.

To participate in the Statewide Hair Mercury Biomonitoring Program and for information on how to collect and submit hair samples contact the Section of Epidemiology, Environmental Public Health Program (907) 269-8000.

*The expert panel consisted of the following agencies and organizations:

Alaska Department of Environmental Conservation
Alaska Department of Health and Social Services
Alaska Native Health Board
Alaska Native Science Commission
Alaska Native Tribal Health Consortium
Aleutian/Pribilof Islands Association, Inc.
Institute for Circumpolar Health Studies, University of Alaska
Anchorage
North Slope Borough
University of Alaska Fairbanks
Yukon Kuskokwim Health Corporation